

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Revision of the Commission's Rules to
Ensure Compatibility With Enhanced 911
Emergency Calling Systems

CC Docket No. 94-102

Amendment of Parts 2 and 25 to Implement the
Global Mobile Personal Communications by
Satellite (GMPCS) Memorandum of
Understanding and Arrangements; Petition of the
National Telecommunications and Information
Administration to Amend Part 25 of the
Commission's Rules to Establish Emissions
Limits for Mobile and Portable Earth Stations
Operating in the 1610-1660.5 MHz Band

IB Docket No. 99-67

REPLY COMMENTS OF ICO GLOBAL COMMUNICATIONS

ICO Global Communications (Holdings) Limited ("ICO")¹ submits reply comments in the above-captioned proceeding addressing the application of basic and enhanced 911 (collectively, "E/911") requirements to services such as mobile satellite service ("MSS").² Subjecting MSS to the same E/911 requirements adopted for terrestrial

¹ ICO is the parent company of ICO Satellite Services G.P., which is authorized to provide 2 GHz MSS services in the United States. All comments filed on February 19, 2003, in CC Docket No. 94-102 and IB Docket No. 99-67 will hereinafter be short cited.

² *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling System*, Further Notice of Proposed Rulemaking, 17 FCC Rcd 25576 (2002) ("FNPRM"). The comment and reply comment dates were extended to February 18, 2003, and March 11, 2003, respectively. See FCC Public Notice, *Wireless Telecommunications Bureau Extends Deadline for Filing Comments and Reply Comments on the Further Notice of Proposed Rulemaking in CC Docket No. 94-102, IB Docket No. 99-67, FCC 02-326, DA 03-209* (Jan. 27, 2003). The reply comment deadline was subsequently extended until March 25, 2003. See FCC Public Notice, *Wireless Telecommunications Bureau Extends Deadline for Filing Reply Comments on the Further Notice of Proposed Rulemaking in CC Docket No. 94-102, IB Docket No. 99-67, FCC 02-326, DA 03-623* (Mar. 5, 2003).

commercial mobile radio services (“CMRS”) will not advance the goal of facilitating subscriber access to some form of basic emergency calling functionality that is both economically and technically achievable.

I. COMMENTS CONFIRM THAT CMRS E/911 IS NOT FEASIBLE FOR MSS

The comments demonstrate that CMRS E/911 requirements are neither technically nor economically feasible for satellite systems. MSS providers confirm that the technical problems associated with generating Automatic Number Identification (“ANI”) and Automatic Location Information (“ALI”) that were reported in response to the 2000 *Public Notice*³ are equally applicable today. More fundamentally, ensuring that the ANI and ALI of an MSS 911 call are not dropped or lost between the MSS system gateway and the destination Public Safety Access Point (“PSAP”) would require retrofitting, at huge expense, every switch in the Public Switched Telephone Network (“PSTN”) that may potentially carry such call.⁴ MSS providers, however, do not control these facilities or the path that a given MSS 911 call originating from the MSS gateway might take over the PSTN. Establishing private trunking lines from the MSS gateway to each and every PSAP across the U.S. to bypass the PSTN routing problem likely would entail aggregate monthly fees on the order of at least several hundred thousand dollars.

ICO agrees with the comments of Globalstar and Mobile Satellite Ventures Subsidiary LLC (“MSV”) that the national call center approach stands out as a workable

³ FCC Public Notice, *International Bureau Invites Further Comment Regarding Adoption of 911 Requirements for Satellite Services*, 16 FCC Rcd 3780 (IB 2000) (“*Public Notice*”).

⁴ Globalstar Comments at 6-8; Mobile Satellite Ventures Subsidiary Comments at 15-16, 21 (“MSV Comments”).

alternative to terrestrial CMRS E/911 that is both technically and economically feasible, as demonstrated by the call centers already established by both Globalstar and MSV.⁵

Although some public safety entities reject the call center approach, they ignore the substantial technical problems associated with applying E/911 to MSS and fail to demonstrate any willingness to work towards practical solutions. For example, the Association of Public-Safety Communications Officials-International, Inc. (“APCO”) suggests that the Commission should not even examine the technical or operational feasibility of providing E/911 in connection with a given service.⁶ APCO’s suggestion seems irrational on its face and does not advance the goal of achieving a workable solution for satellite systems.⁷

ICO agrees with Globalstar and MSV that the task of creating and administering a national database of PSAPs in every state, county and local jurisdiction across the United States is “overly burdensome” for any given MSS provider, and would be better achieved if the Commission designated a private entity or organization to perform that function.⁸

APCO notes that national cellular carriers and telematic service providers (“TSPs”) have

⁵ MSV Comments at 8; Globalstar Comments at 3.

⁶ APCO Comments at 4.

⁷ Similarly, ICO opposes the Boulder Regional Emergency Telephone Service Authority’s (“BRETSA”) rejection of the call center approach. BRETSA Comments at 5-6. BRETSA insists that all MSS 911 calls should be transmitted to PSAPs over trunks from the MSS gateway and proposes the establishment of an “interstate backbone network and national default PSAP,” but fails to address who will pay the substantial costs of establishing such trunks and network facilities. *Id.* at 7. The National Emergency Numbering Association and the National Association of State Nine One One Administrators (collectively, “NENA”) support the call center approach in “the short term,” but contend that E/911 will ultimately be technically achievable for MSS as a result of “improved capabilities” and “redesign[]” of the PSTN. NENA Comments at 7-8. It is not clear, however, that the entities that own and control the PSTN facilities have any incentive to upgrade their facilities merely to accommodate MSS 911 calls. For their part, MSS providers have no control over these facilities.

compiled PSAP databases that cover the entire United States, but fails to acknowledge that the scope of this task is entirely different for MSS providers.⁹ Cellular providers, whether they are national, regional or local in scope, need only identify the PSAPs that are closest to the towers they operate, in order to route 911 calls received by these towers. In areas where a national cellular footprint is achieved through roaming agreements with other CMRS carriers, PSAP identification is the responsibility of the underlying facilities-based carrier. Furthermore, because TSPs rely upon the same terrestrial CMRS infrastructure to carry their traffic, they ultimately need only identify the PSAPs within their underlying carriers' service areas.¹⁰ In contrast, MSS providers offer service to every corner of the United States and thus would be faced with the daunting task of identifying every one of the 10,000-plus PSAPs located throughout the United States.

Finally, ICO agrees with Globalstar that before imposing any emergency calling requirements upon MSS providers, the Commission must afford MSS providers the same liability protections afforded to terrestrial CMRS and wireline carriers under the Wireless Communications and Public Safety Act of 1999.¹¹

⁸ Globalstar Comments at 5-6; MSV Comments at 10.

⁹ APCO Comments at 7.

¹⁰ Since a telematic call center only receives emergency calls made over the wireless infrastructure of facilities-based CMRS carriers, its task is limited to identifying the PSAPs within the service areas of its facilities-based CMRS partners. Presumably, the underlying facilities-based CMRS provider will be able to provide the TSP with PSAP information relevant to its service area. The TSP does not have to track down the PSAPs for areas not served by its facilities-based CMRS partners because its call center cannot receive an emergency call from such area.

¹¹ Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, § 4, 113 Stat. 1286, 1288 (1999). *See* Globalstar Comments at 5.

II. MSS AND TERRESTRIAL CMRS ARE NOT COMPARABLE FOR E/911 PURPOSES

As ICO noted in its comments, the Commission recently concluded that even with an ancillary terrestrial component, MSS does not compete with terrestrial CMRS or wireline local exchange services.¹² Other MSS parties agree that MSS has different prices, coverage, product acceptance and distribution, and operates in a predominately different market segment from terrestrial CMRS.¹³

Despite the Commission's conclusion and the substantial technical record in this proceeding to the contrary, some terrestrial CMRS parties contend that MSS is comparable to terrestrial CMRS and, therefore, that technical and competitive "neutrality" requires that the same E/911 requirements applied to terrestrial CMRS must be applied to MSS.¹⁴

AT&T Wireless Services, Inc. ("AWS"), for example, claims that the technical hurdles faced by MSS are not "significantly distinct from those faced by nationwide CMRS providers with respect to 911."¹⁵ As the record well demonstrates, however, AWS' assertion is simply wrong. MSS systems utilize a single gateway and are inherently national networks, whereas so-called "nationwide CMRS" systems are nothing more than aggregations of multiple local CMRS cells. Leaving aside the significant technical

¹² See ICO Comments at 4 n.7 (citing *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Report and Order and Notice of Proposed Rulemaking, FCC 03-15 ¶ 229 (Feb. 10, 2003)).

¹³ See, e.g., MSV Comments at 17 ("Whereas current MSS user terminals are expensive and airtime costs are typically in the range of dollars per minute, terrestrial mobile customers typically pay nothing for equipment and enjoy airtime charges that are often less than a tenth of those assessed to MSS customers. In addition, MSV's current end user equipment is large, often the size of a briefcase, whereas terrestrial mobile phones can fit comfortably in a shirt pocket.").

¹⁴ See AT&T Wireless, Inc. Comments at 2 ("AWS Comments"); Sprint Comments at 4. See also APCO Comments at 6.

¹⁵ AWS Comments at 4.

problems of generating ANI and ALI, MSS providers face the fundamental problem of routing ANI and ALI from the MSS gateway over the PSTN to the proper PSAP. On the other hand, the task for terrestrial CMRS providers, whether national, regional or local in scope of service, is limited to routing ANI and ALI from the service tower to the nearby local PSAP, which more often than not is a point-to-point connection.

Sprint acknowledges the “technical hurdles and significant expense” of applying terrestrial E/911 requirements to MSS, but claims that it would be unfair to exempt MSS systems because the Commission has rejected such considerations for terrestrial CMRS.¹⁶ Like AWS, Sprint is comparing apples to oranges. When the Commission applied E/911 requirements to terrestrial CMRS services in 1996, the Commission found that, “[i]n 1994, almost 18 *million* wireless calls were made to 911 and other public service numbers.”¹⁷ The Commission added that the number of such calls were “growing rapidly, spurred by the rapid growth in cellular subscribers.”¹⁸ In contrast, Globalstar and MSV report a yearly total of approximately 154 emergency 911 calls for 2002¹⁹ – which is less than one ten-thousandth of a percent of the yearly total of 911 calls experienced by terrestrial CMRS services nine years ago. Moreover, unlike the present situation with MSS, it was widely accepted that compliance with E/911 requirements applied to terrestrial CMRS in 1996 was technically feasible – the main question was whether such implementation could be

¹⁶ Sprint Comments at 2.

¹⁷ *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676, 18680 ¶ 6 (1996) (emphasis added) (“*E/911 Order*”).

¹⁸ *Id.*

¹⁹ MSV Comments at ii (reporting a total of 10 emergency calls received in 2002); Globalstar Comments at 2 (reporting receipt of about 12 emergency calls per month in 2002).

achieved within the Commission's initial 5-year schedule.²⁰ In any event, the Commission found that the fixed costs of compliance would be offset by the economies of scale in equipment manufacturing and the ever-widening base of subscribership over which those costs would be spread.²¹ Such economies of scale will not apply to MSS offerings, which require system-specific equipment that is unlikely to be mass produced at consumer electronic levels. Moreover, as ICO explained in its comments, the subscribership levels of terrestrial CMRS at the time E/911 requirements were adopted for terrestrial CMRS were exponentially higher than MSS is today and sufficiently high to absorb the costs of E/911 compliance.²²

CONCLUSION

As an alternative to adopting CMRS E/911 requirements that are fundamentally unworkable for satellite systems, MSS providers should be permitted to meet their

²⁰ According to the *E911 Order*, the Cellular Telecommunications and Internet Association, for example, asserted that "E911 is technically feasible and can be deployed within the proposed five-year schedule." *E/911 Order*, 11 FCC Rcd at 18705 ¶ 57.

²¹ *Id.* at 18708 ¶ 62.

²² Terrestrial CMRS subscribership stood at 44 million at the time CMRS E/911 requirements were adopted in 1996. In contrast, Globalstar reports 66,000 commercial customers in the United States as of 2001. See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Seventh Report, 17 FCC Rcd 12985, 13026 (2002).

emergency calling obligations through the national call center approach. In addition, the Commission should designate a private entity or organization that will administer a centralized, national registry of PSAPs.

Respectfully submitted,

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CERTIFICATE OF SERVICE

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